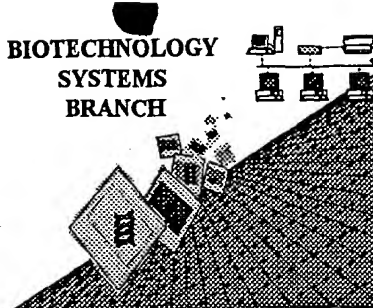


RAW SEQUENCE LISTING **ERROR REPORT**

BIOTECHNOLOGY
SYSTEMS
BRANCH



0500

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/611,527

Source: OIPK

Date Processed by STIC: 7/25/2000

1 1/2

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) **INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
- 2) **TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**

FOR FURTHER INFORMATION, PLEASE TELEPHONE MARK SPENCER, 703-308-4212.

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:

<http://www.uspto.gov/web/offices/pac/checker>

OIPE

RAW SEQUENCE LISTING

DATE: 07/25/2000

PATENT APPLICATION: US/09/611,527

TIME: 17:40:46

Input Set : C:\jumbos\PPP.app

Output Set: N:\CRF3\07252000\I611527.raw

Does Not Comply
Corrected Diskette Needed

```

3 <110> APPLICANT: Williams, Lewis T.
4     Escobedo, Jaime
5     Innis, Michael A.
6     Garcia, Pablo Dominguez
7     Klinger, Julie
8     Reinhard, Christoph
9     Randazzo, Filippo
10    Kennedy, Giulia C.
11    Pot, David
12    Lamson, George
13    Drmanac, Radoje
14    Crkvenjakov, Radomir
15    Dickson, Mark
16    Drmanac, Snezana
17    Labat, Ivan
18    Leshkowitz, Dena
19    Kita, David
20    Garcia, Veronica
21    Jones, William Lee
22    Stache-Crain, Birjit
24 <120> TITLE OF INVENTION: NOVEL HUMAN GENES AND GENE EXPRESSION
25    PRODUCTS
27 <130> FILE REFERENCE: 200130.512
C--> 29 <140> CURRENT APPLICATION NUMBER: US/09/611,527
30 <141> CURRENT FILING DATE: 2000-06-30
32 <160> NUMBER OF SEQ ID NOS: 3351
34 <170> SOFTWARE: FastSEQ for Windows Version 3.0

```

ERRORED SEQUENCES

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4836 <210> SEQ ID NO: 304
4837 <211> LENGTH: 401
4838 <212> TYPE: DNA
4839 <213> ORGANISM: Homo sapien
4841 <400> SEQUENCE: 304
E--> 4842
cgttgctgtc ggcagaacga ggccagtatg atcaatgggc tgggggcagc agaggcattc 60ccctctgggt gtacagcgac agctgggaga ga:
4843 aggcagatcg aggggcagtc tccggagccg gtgttcggag atgctgatgt ggatgtgtct 180
4844 gcagttcagg cgaagttggg agccctggaa ctgaaccaga gggatgctgc agctgaaact 240
4845 gagctcaggg tgcaccaccc ctgccagcgg cactgcccag agccgcccag tgcaccggaa 300
4846 gaaaacaaag ccaccagcaa agctcccca ggcagcaact caaaaacccc catcttttagc 360
4847 ccttttccca gcgtcaagcc ccttgcgga tctgctactg g 401
6274 <210> SEQ ID NO: 395
6275 <211> LENGTH: 388
6276 <212> TYPE: DNA
6277 <213> ORGANISM: Homo sapien
6279 <400> SEQUENCE: 395

```

insert a hard return
after each cumulative
base total figure

RAW SEQUENCE LISTING DATE: 07/25/2000
 PATENT APPLICATION: US/09/611,527 TIME: 17:40:46

Input Set : C:\jumbos\PPP.app
 Output Set : N:\CRF3\07252000\I611527.raw

```

6280 atcgattcga attcggcagc agatccaagc catctgcacg gcagcctttt accggaagga      60
6281 gtggccgctc ctggtggtgg tgccatcctc cgtgcgcttc acctgggagc aggccttctc      120
6282 tcggtggctg ccatctctga gccagattg catcaacgct gaggtgactg ggaaggaccg      180
6283 cctgacagct ggctgatca acattgtcag ctttgacctt cttagcaagt tggaaaaaca      240
6284 gctaacaacc ctttttaaag ttgtcatcat tgatgccaag agggatgatc tgttgcggg      300
E--> 6285
cacaccagcc atgtccgggc ccgagagct ctacacgcag atcatcgag tcaagccaac      360tttctctccc cagtctcatg cttttgga
6460 <210> SEQ ID NO: 408
6461 <211> LENGTH: 382
6462 <212> TYPE: DNA
6463 <213> ORGANISM: Homo sapien
6465 <400> SEQUENCE: 408
6466 aaaaacaatt agctaactgg tgattgtgtg aaggatgaac tggattaggc caaggtgatc      60
6467 aagaagaaga ttggtagatt aacgtggtca ggaggtcatg agaacttcaa atgaggcagt      120
6468 gaccatcagg aaaaaatttg taagaagaat ggtcaggacc aaatgagttt ggtttggtcc      180
E--> 6469
tgctgagttt gaggcatatg gtggaactg cccagctccc tcttcagaa atgagacact      240cttctccctag ctggcctggt ataggctgtt aat
6470 ctgcaccttg gctgaaagga gctacaagga gttcatgggt gactttggcc agaggagttg      360
6471 atgaggagag gaaggctctg gg
7537 <210> SEQ ID NO: 475
7538 <211> LENGTH: 359
7539 <212> TYPE: DNA
7540 <213> ORGANISM: Homo sapien
7542 <400> SEQUENCE: 475
7543 cgttgctgtc gcggggcgga gcttggtgctc aagaatgtcc aggagcaggc agagggcatc      60
7544 gaggagcagg gcctggggcg tggcccggtc gcgcgtggtt ggcgcgatgc cggacaccag      120
7545 cgtctggatc aggttctca tctggtcatc ccggttctgg gcctcctgct ggctgctggg      180
E--> 7546
gaaggtgatc ctgggtgtgt ggctggaagc aaacagcaca tggaaagcca cgggcaggaa      240gggtgggtag cgcagcagct ggaagctctg gct
7547 atcgaaggcc agccagtcga gggccacaca cacagcacc caggctggag ctgcagcc      359
11131 <210> SEQ ID NO: 698
11132 <211> LENGTH: 390
11133 <212> TYPE: DNA
11134 <213> ORGANISM: Homo sapien
11136 <400> SEQUENCE: 698
11137 ggcacgagat cacctcctgc tcggtgctgt ggtcacaaca tgccttcag gcgcgtgctg      60
11138 ggctaggggc ggggtgctcc tctggtggcc tggcgcccg cgcctcctg gcacgtgccc      120
11139 ccgccccag gatgtggagt cagagaacgt caacgtggtg aagcggctgt tcaagatcca      180
11140 gaacctcatt gccagcaccg ttcgcacggt gatggtggcc gactgcagcc gcttctacag      240
E--> 11141
ccctgacctg ctgctggaag ccggtgacct ggccacgtcc ccctgccgca tctttgacct      300gggcagcgac aacgaggagg tgggtgctgc tct
11142 tgaggactat tcttacagcg agctggaggg      390
12762 <210> SEQ ID NO: 802
12763 <211> LENGTH: 395
12764 <212> TYPE: DNA
12765 <213> ORGANISM: Homo sapien
12767 <400> SEQUENCE: 802
E--> 12768
ttcgaattcg gcacgagct ctccacttca tcccaggaa gcagctgtgt gacggagagc      60tgactgtcc cttgggggag gacgaggagc ac
12769 cagtggcagt ccgctctcc aaggaccgat ccacactgca ggtgctggac tcggccacag      180
12770 ggaactgggt ctctgcctgt ttcgacaact tcacagaagc tctcgtgag acagcctgta      240
12771 ggcagatggg ctacagcagc aaacctactt tcagagctgt ggagattggc ccagaccagg      300
12772 atctggatgt tgttgaaatc acaggctaca gggagaccgg gaggatcaca gagccagcat      360
12773 gttacaggat cctgacagtg atcaacctct gaaca      395

```

RAW SEQUENCE LISTING DATE: 07/25/2000
 PATENT APPLICATION: US/09/611,527 TIME: 17:40:48

Input Set : C:\jumbos\PPP.app
 Output Set: N:\CRF3\07252000\I611527.raw

```

19198 <210> SEQ ID NO: 1203
19199 <211> LENGTH: 415
19200 <212> TYPE: DNA
19201 <213> ORGANISM: Homo sapien
19203 <220> FEATURE:
19204 <221> NAME/KEY: misc_feature
19205 <222> LOCATION: (1)...(415)
19206 <223> OTHER INFORMATION: n = A,T,C or G
19208 <400> SEQUENCE: 1203
19209   tacggctgctg agaagacgac agaaggggac acaaatatcac aaggaaagct ccatggaaga      60
E--> 19210
      taaaggcaga gatttacaag ccaaggaatg tcaaaagacg ccagcacacc accagaagct      120
      120agcagagagg tatggaacag attcttcttc aci
W--> 19211   ctggatttca aactcctggc ctccagaacg agacggngtt ttaccacggt agccgcgctg      240
      19212   ggcttgaact cctgacctca ggtgateccac ccgcctcgat cgccattata acaatcanat      300
      19213   ggctgtcttc atggactggt acaaaacaga atatacacca tggacagaca gaggctcaga      360
W--> 19214   acacacacac tctacaccan tgatcttgca acctgacaaa cagcatgaga aggac      415
29199 <210> SEQ ID NO: 1828
29200 <211> LENGTH: 420
29201 <212> TYPE: DNA
29202 <213> ORGANISM: Homo sapien
29204 <400> SEQUENCE: 1828
29205   ggcacgaggg aggggctgga cgttccacgc caaaggcctc tggtgttacc tggcagggag      60
29206   cagcctgccc tgcctcacgc tgattggctc tectaatttt ggttacaggt cagttcaccc      120
29207   ggacctggag gccagattg cgategtgac ggagaaccag gccctgcagc agcagcttca      180
E--> 29208
      ccaggagcaa gacagctctt acctgaggtc aggtgtggtg tctctgcca ccttcgagca      240
      240gccagtcgc caggtgaagc tgtgggtgaa gai
29209   ctgaggacag acaggaatgg ccttgatgaa gatgacaggc atggccgggg tcagctcttt      360
29210   cagccgcgct tcagcgatga ctccagtctg ggtgtcccag cgagccctg cagggacagt      420
36950 <210> SEQ ID NO: 2325
36951 <211> LENGTH: 367
36952 <212> TYPE: DNA
36953 <213> ORGANISM: Homo sapien
36955 <400> SEQUENCE: 2325
36956   gccgtcaggt gcgggcccag gtggcaggcg cgcccgttgg gcactggggg acgcggggcg      60
36957   gtcaggtgaa gactgggggc cgcaggcgcg ctaggagaac tatgccattt ttgggtcagg      120
36958   actggagatc tcttggtatg agttggatta agacagaaga tggctggaag agatgtgaat      180
36959   cttgtagtca gaaacttgaa agagagaata accgttgtaa catcagtcac agcattatct      240
E--> 36960
      taaatagtga agatggagaa atattcaata atgaagagca tgaatatgca tcgaaaaaaa      300
      300ccattttaga aatgacacaa atactcaaaa ggc:
E--> 36961   ggagaagcct ttaatcg      377
45040 <210> SEQ ID NO: 2860
45041 <211> LENGTH: 420
45042 <212> TYPE: DNA
45043 <213> ORGANISM: Homo sapien
45045 <400> SEQUENCE: 2860
45046   ggcacgagga gagagagaga gttagagtta tagagagaga gagagagaga gagagagaga      60
45047   gagagagaga gagagagaga gagagagaga gagagagaga gagagacaga gagagagaga      120
45048   gagagagaga gagagagaga gagagagaga gagagagaga gagagagaga gagagcgccc      180
45049   ctctctctct tttttctgtg cgctcttgcg atagatatct tttttctct ctcgcgcgtg      240
45050   ttttctcaca cacacacaaa aaagcgtctt cccctcacac gccccccct ctcgtgtggag      300
45051   tgtagaatat gtgtgcgctg gctttcttct tctctctctg tgaggggggt ttccccccct      360
E--> 45052
      tcgtttgtgt gtgggctctt tatgtgtgtt ttctctcgcg cgcccgacac ttttaaaaaa      420

```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/611,527

DATE: 07/26/2000
TIME: 18:39:39

Input Set : N:\jumbos\611527
Output Set: N:\CRF3\07262000\I611527.raw

3 <110> APPLICANT: Williams, Lewis T.
4 Escobedo, Jaime
5 Innis, Michael A.
6 Garcia, Pablo Dominguez
7 Klinger, Julie
8 Reinhard, Christoph
9 Randazzo, Filippo
10 Kennedy, Giulia C.
11 Pot, David
12 Lamson, George
13 Drmanac, Radoje
14 Crkvenjakov, Radomir
15 Dickson, Mark
16 Drmanac, Snezana
17 Labat, Ivan
18 Leshkowitz, Dena
19 Kita, David
20 Garcia, Veronica
21 Jones, William Lee
22 Stache-Crain, Birjit
24 <120> TITLE OF INVENTION: NOVEL HUMAN GENES AND GENE EXPRESSION
25 PRODUCTS
27 <130> FILE REFERENCE: 200130.512
C--> 29 <140> CURRENT APPLICATION NUMBER: US/09/611,527
30 <141> CURRENT FILING DATE: 2000-06-30
32 <160> NUMBER OF SEQ ID NOS: 3351
34 <170> SOFTWARE: FastSEQ for Windows Version 3.0

ERRORED SEQUENCES

36958 <210> SEQ ID NO: 2325
36959 <211> LENGTH: (377) 367
36960 <212> TYPE: DNA
36961 <213> ORGANISM: Homo sapien
36963 <400> SEQUENCE: 2325
36964 gccgtcaggt gcgggccag gtggcagcg cgcccgttg gcactggggg acgcgggcgc 60
36965 gtcaggtgaa gactgggggc cgcaggcgcg ctaggagaac tatgccattt ttgggtcagg 120
36966 actggagatc tcctggatgg agttggatta agacagaaga tggctggaag agatgtgaat 180
36967 cttgtagtca gaaacttgaa agagagaata accgttgtaa catcagtoac agcattatct 240
36968 taaatagtga agatggagaa atattcaata atgaagagca tgaatatgca tcgaaaaaaaa 300
E--> 36969 ccattttaga aatgacacaa atactcaaaa ggcatggcta ttgcaccttg (360) 350 (377)
E--> 36970 gaaaaaacct ttaatca 367

This error
appeared
after STC
inserted a
hard return
at end of "300"
figure

see next page for more error

<210> 705
<211> 387
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(387)
<223> n = A,T,C or G

<400> 705
tcaattcggc acgaggtggt atccagttct gacttgacag acatgagctt tttctcagct 60
ttctccttca tcttctccag ttggtctctg gatttgttta gatcttcaat ggcttttagtc 120
tgttccaaag ctttaatacta caaagtcaag agaatgctga taactccttt tgtatttagt 180
taggaaaact gtctaaacat gacaaatcag aagtcaatgg aattcacttc ataccctttt 240
tatgaataaa gaatggagtt catcccatc agctagagat ttgctaagc atatgtgctg 300
gacaaacatg tcttaataca gttaccgctt caaaccacac cttagaggac cttattttg 360
aaaattcatt gaaaaaaaaac tgatacn 387

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.